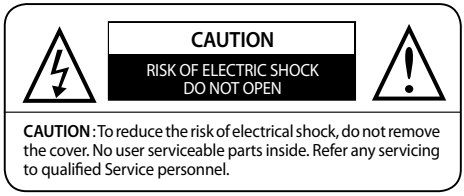
User's Manual

High Definition Cable Receiver
Personal Video Recorder

upc

Important safety instructions

Safety Warnings


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION : To reduce the risk of electrical shock, do not remove the cover. No user serviceable parts inside. Refer any servicing to qualified Service personnel.

This symbol indicates that dangerous voltage consisting a risk of electric shock is present within this unit.

This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

Read this manual carefully before using the product. The cautions described below contain important information about safety, and are categorized into: Danger, Warning and Notice.
The company will not take any responsibility for accidents or damage resulting from careless handling by the user.

Danger

If the user mishandles the product, there is a risk of loss of life or critical injury.

- Connect the power cord only to A/C outlets as specified by the user manual or product specification. If the power code is connected to a non-specified A/C outlet, it could result in fire or electric shock.
- The product must not be exposed to water or liquid of any sort, or be exposed to drips or splashes. It could result in fire or electric shock.
- Do not place heavy objects, including the product itself, on top of the power cord. If it is damaged, it could result in fire or electric shock.
- Do not place metal objects on top of the apparatus. If metal objects fall into the apparatus, it could result in fire or electric shock.
- Do not repair, disassemble or modify this apparatus yourself. It might cause fire or electric shock. If internal checking or maintenance is needed, please contact your service center or agency.
- Do not block or cover any ventilation opening. A fire might result from overheating.
- Turn off and unplug the power as quickly as possible during electric storms. Failure to do so could result in fire or electric shock.
- Remove the antenna's power plug from the outlet as quickly as possible during electric storms. Failure to do so could result in fire or electric shock.
- Do not drop the apparatus (for example by putting it in a place where it may fall) or subject it to impact. The product might be damaged. If it is damaged, please turn off the power and remove the plug from the power outlet, or fire or electric shock may result.
- Never touch the power cord with wet hands. It could result in an electric shock.

Warning

If the product is mishandled, the user might receive a serious or minor injury.
Damage or loss to the user's property might also result.

- The product must not be exposed to water or liquid. If the apparatus is exposed to drips or splashes, it might cause a problem that cannot be repaired.
- Do not repair, disassemble or modify this apparatus yourself. It might be seriously damaged, possibly beyond repair.
- Turn off the power and unplug the power cord as quickly as possible during electric storms. They might damage the apparatus.
- Remove the antenna's power plug from the outlet as quickly as possible during electric storms, or the apparatus might be damaged.
- Data recorded in the HDD might be lost due to a shock, lightening or electricity failure. The user must back up his or her own data, and the company does not take any responsibility for failure to do so.

Notice

If the product is mishandled, it might cause minor damage.

- If the apparatus becomes marked, clean it gently with a soft cloth or towel. Never use chemical solvents such as benzene, thinner, acetone or other solvents. The surface of the apparatus might become discolored and the paint might peel.
- Do not place or keep the apparatus in the following situations. Doing so might cause problems.
  - Where it is too hot or cold.
  - Where there is high humidity.
  - Where there are excessive temperatures, for example in front of airconditioners or heating vents.
  - Where there is dust or soot.
  - In confined areas where the heat cannot be released.
  - Where it is exposed to direct sunlight.
- Turn the apparatus off or unplug the power cord if it is to remain unused for a long period of time.
- Do not place heavy objects on top of this apparatus. It might cause malfunction or damage.
- If the apparatus is so seriously damaged that it cannot be repaired, or has stopped working altogether, dispose of it properly in accordance with the local laws or regulations in your area.

Disposal

Batteries and packaging material do not belong in domestic waste. The batteries must be delivered to a collection center for old batteries. The separate disposal of packaging materials protects the environment.

Disposal old electrical & electronic equipment
(Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

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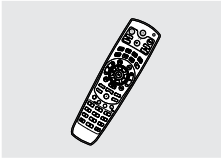
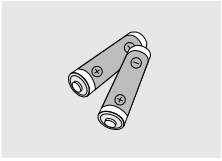
1. Introduction

1.1 Package Contents

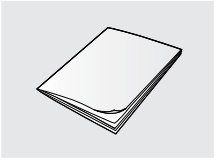
Make sure that the following accessories are supplied with your receiver.



Remote control

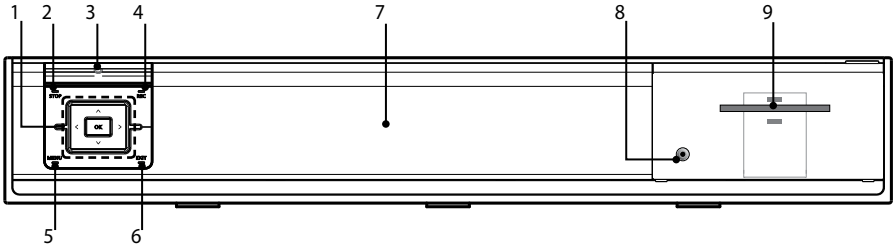


AAA Batteries (2 EA)



User's manual

1.2 Front Panel



1	**∧∨/ Channel (Programme)**	Press to change the channel or select a menu item.
	< >/ Volume	Press to adjust the volume or select a menu item.
	OK	Press to select a menu, or confirm the selected operation.
2	**STOP**	Press to stop a recording or playback.
3	**STANDBY (Power)**	Press to turn the receiver power on or off.
4	**REC**	Press to record a programme.
5	**MENU**	Press to display the main menu on the screen or return to the previous menu.
6	**EXIT**	Press to exit and return to the previous menu and screen.
7	**Display window**	Displays the current state such as channel, time, and massage.
8	**Reset**	Press to restart the receiver.
9	**Smartcard Slot**	Slot for Smartcard.

B The front of the product is subject to change without notice.

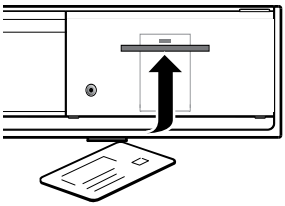
1.3 Smartcard

Caution
Please do not plug in the main power supply cord until you have finished all of the connections!

Inserting a Smart card

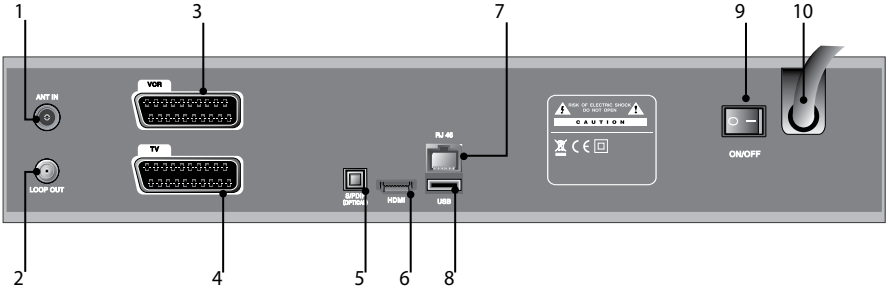
A Smart card looks similar to a credit card and entitles you to view and listen to all the channels you choose to subscribe to.
The Smart card slot on the receiver can be used for Smart cards only.

1. Open the right-hand cover on the front panel of the receiver.
2. Hold the Smart card horizontally with the electronic chip (small square-shaped, gold in colour) facing upwards.
3. Insert the Smart card into the top slot.



Smartcard

1.4 Rear Panel

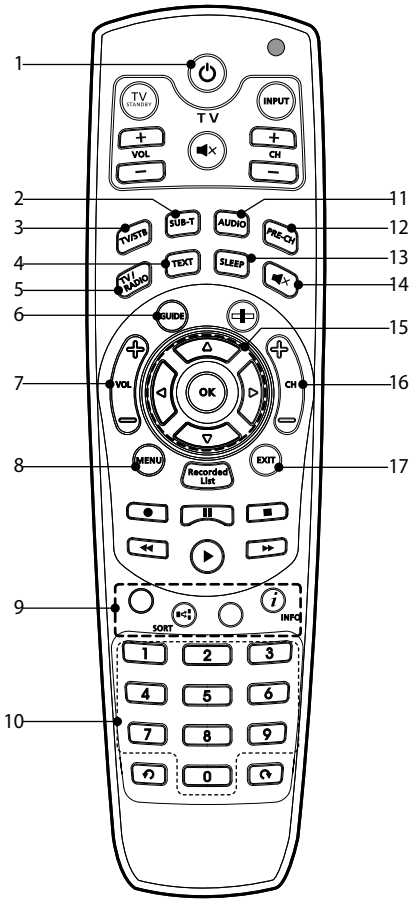


1	**ANT IN**	Connect a CATV signals.
2	**LOOP OUT**	Connect to other receiver.
3	**VCR (SCART)**	Connect to the VCR with SCART cable.
4	**TV (SCART)**	Connect to the TV with SCART cable.
5	**S/PDIF (OPTICAL)**	Connect a digital amplifier output
6	**HDMI**	Use the HDMI cable to connect this jack to the HDMI jack on your TV for the best quality picture.
7	**RJ45**	Connect the LAN cable.
8	**USB**	Connect the USB memory with USB cable.
9	**ON/OFF (Power switch)**	Turn on and off the receiver.
10	**Power supply**	90~250V AC, 50/60Hz

B The rear of the product is subject to change without notice.

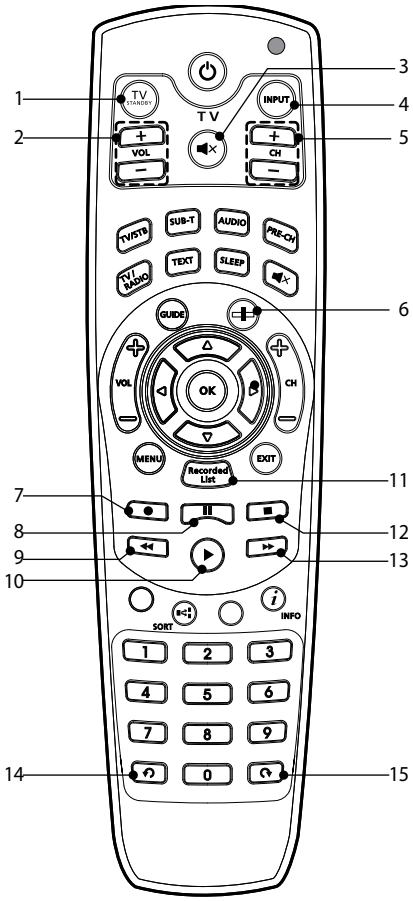
1.5 Remote Control

All the functions can be controlled with the remote control.
Some function can also be adjusted with the buttons on the front panel of the receiver.
Before you use the remote control, please install the batteries.



Basic functions

1. **STANDBY** Press to switch between operation and standby mode.
2. **SUB-T** Press to enable or disable subtitle.
3. **TV/STB** Press to switch between TV and Receiver mode.
4. **TEXT** Press to see the teletext by OSD.
5. **TV/RADIO** Press to switch between TV and Radio.
6. **GUIDE** Press to display the TV/Radio program guide.
7. **VOL** (+/ –) Press to increase or decrease the volume.
8. **MENU** Press to display the main menu on the screen or return to the previous menu.
9. **Color buttons**
   Red: Press to perform functions in "**PVR**", "**Program Guide**" or "**Edit Channel List**" menu.
   Green (SORT): Press to sort channel list.
   Yellow: Press to perform functions in "**PVR**", "**Program Guide**" or "**Edit Channel List**" menu.
   Blue (INFO): Press to display the information box on the screen, or to perform functions in "**Program Guide**" or "**Edit Channel List**" menu.
10. **Numeric buttons** Press to select the channel and enter the PIN code.
11. **AUDIO** Press to select the audio language or the sound mode. (Mono, Left, Right, Stereo).
12. **PRE-CH** Press to return to the previous channel.
13. **SLEEP** Press to select a present time interval for automatic shut off.
14. **Mute** Press to enable or disable audio temporarily.
15. **▲/▼/◀/▶ (Arrow buttons)** Press to move the cursor to the up, down, left or right menu option.
    OK Press to selects a menu, or confirms the selected operation.
16. **CH** (+/-) Press to change channel up and down.
17. **EXIT** Press to return the normal viewing mode from a menu.



TV Control Buttons

1. **TV STANDBY** Press to turn on and off your TV.
2. **TV Volume** Press to increase or decrease the TV volume.
3. **TV MUTE** Press to enable or disable the TV audio temporarily.
4. **INPUT** Press to check the TV's external connection status and select an external device.
5. **TV Channel** Press to change the current TV channel.

PVR Functions

6. **Progress bar** Press to display the progress bar during playback or Time Shift.
7. **Record** Press to record the current channel to the HDD.
8. **Pause** Press to pause.
9. **Fast rewind** Press to rewind at high speed. Each time you press this button the rewind speed is increased.
10. **Play** Press to play at normal speed or resumes.
11. **Recorded List** Press to display the recording list.
12. **Stop** Press to stop a recording or playback.
13. **Fast forward** Press to fast forward at high speed. Each time you press this button the fast forward speed is increased.
14. **Instant replay** Press to jump back and plays from that location.
15. **Commercial Skip** Press to jump ahead in a recording.

Installing Batteries in the Remote Control

When inserting batteries, make sure that the polarity (+/-) is correct.

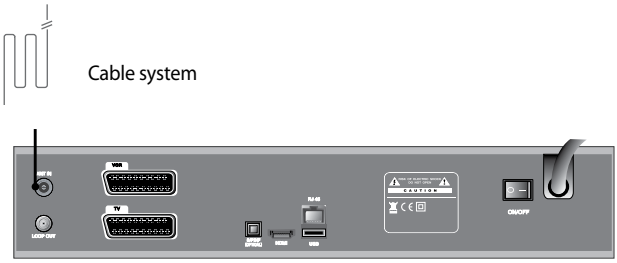
B The design of the remote control may be changed without any notice in advance.

2. Setup

There are several ways of connecting the receiver to your TV and VCR. Consult your local supplier for assistance in setting-up your system that is best suited to your requirements.

2.1 Connecting the Antenna

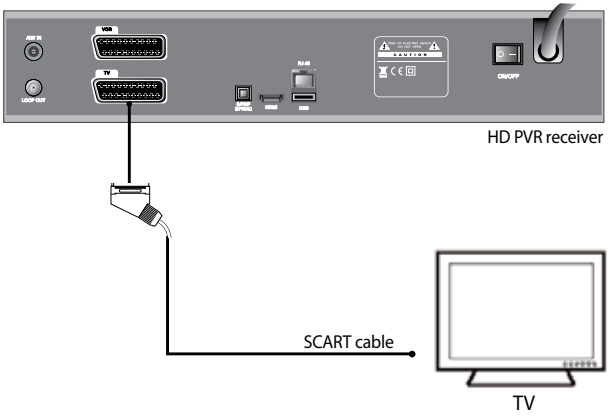
Connect the antenna cable (RF cable) from cable system to the ANT IN jack of the receiver.
Connect a Loop through cable between the LOOP OUT and the ANT IN. (If not connected, you can not record.)



2.2 Connecting Your Equipment

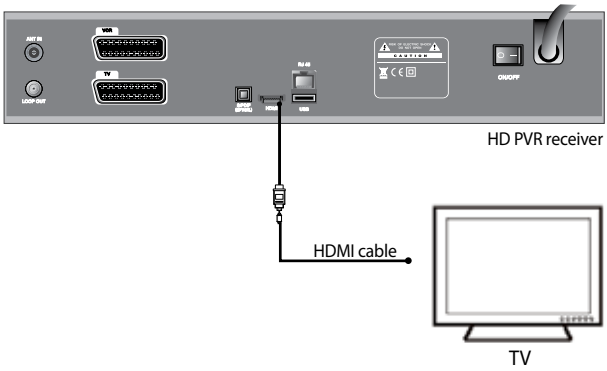
2.2.1 Connecting a TV (SCART/AV jack)

Connect the receiver to a TV with SCART.



2.2.2 Connecting a TV (HDMI jack)

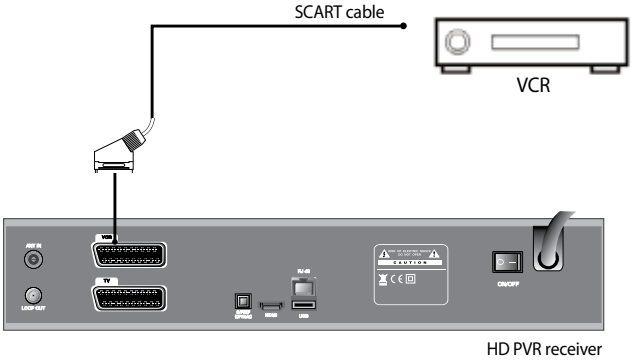
Connect the receiver to a TV with HDMI jack, if your TV is equipped for it.



B HDMI, or high-definition multimedia interface, is a next-generation interface that enables the transmission of digital audio and video signals using a single cable without compression. "Multimedia interface" is a more accurate name for it especially because it allows multiple channels of digital audio (5.1 channels). When connecting via HDMI, you do not need to connect Audio Cables.

2.2.3 Connecting a VCR

Connect the receiver to a VCR with SCART.



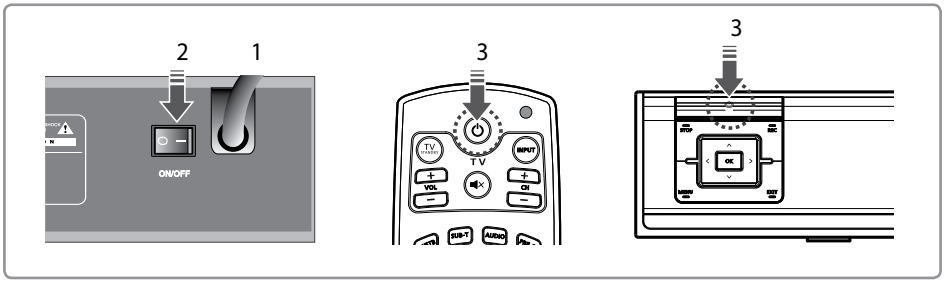
2.2.4 Loop Though

If you have another digital receiver and you wish to use the same antenna cable, then you can connect it via the loop through. Connect one end of the coaxial cable to the Loop Through on the receiver and connect the other end of the cable to the ANT IN jack on your second receiver.

2.3 Turning On and Off Your Receiver

Power On

1. Connect the power cord of the receiver to a wall outlet.
2. Turn on the power switch located at the back of the receiver.
3. Press the **STANDBY** button on the front of the receiver or on the remote control.



Power Off

Press the **STANDBY** button again.
The receiver will display "**Off**".

3. Easy installation

Before you watch the television or radio program, you must perform the installation procedure first.
Therefore you will see only "**Easy Installation**" menu at first when you plug into your system.
The Easy Installation gives you the convenience of selecting various languages, adjusting the time and channel search.

3.1 Language

The first option in "**Easy Installation**" is to select the desired language of the Menu, Audio, or Subtitle.

Press the ▲/▼ button to select desired language and press the **OK** button to change the language.

- The Language of the Menu, Audio, or Subtitle will be changed to the selected language.

3.2 TV

You can set the aspect ratio of your TV.

Press the ▲/▼ button to select desired option and press the **OK** button.

- If you have a TV set with 4:3 picture format, select 4:3 TV and if you have a TV set with 16:9 picture format, select 16:9 TV.

3.3 Screen Type

You can select the display format according to the TV screen ratio.

Press the ▲/▼ button to select desired option and press the **OK** button.

4:3 TV	Auto, Letterbox, Center cut
16:9 TV	Auto, Pillarbox, Pan and scan

3.4 Resolution

The receiver supports various video resolutions (576p, 720p, and 1080i).
Press the ▲/▼ button to select desired option and press the **OK** button.

3.5 Time

You can set your local time according to your location.

When "Auto" is selected

Press the ▲/▼ buttons to select desired country and press the **OK** button.

When "Manual" is selected

1. Press the ◀/▶ button to select the current time zone from standard time and then press the **OK** button. When you press the ◀/▶ button, the time zone will move by 30 minutes.
2. If you want to turn the Day Light Saving on, press the ◀/▶ button to select "**On**" and press the **OK** button.

3.6 Search

You can search the channels according to the automatic or manual mode. Please wait until the channel search is complete.

1. Press the ◀/▶ button to select "**Homing**", "**Auto**", "**Manual**", or "**Network ID**".
2. Press the ▲/▼button to select the desired option and then press the ◀/▶/**Numeric** button to set it as you want.

B For more information, refer to ***5.4 Installation***.

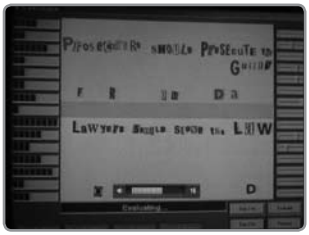
4. Basic Functions

4.1 Changing the Channel

After the television channels have been programmed, you will see programme information for a few seconds each time you change the channels.
You can change the current channel using one of the following methods.

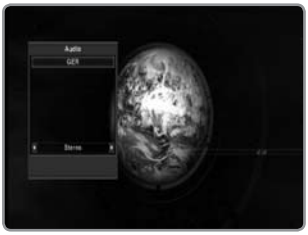
- You can change the channel using the **CH +/–** button and change to desired channel by entering its channel number with the **Numeric** (0-9) buttons.
- Press the **PRE-CH** button to return to the previous channel.
- Press the **TV/RADIO** button to switch between TV channels and radio channels.
- You can change channel by using the channel banner, simple channel list, or program guide.

4.2 Volume Control



- Press the **VOL +/–** buttons to adjust the volume level.
  Volume level bar is displayed.
- Press the **Mute** button to temporarily stop the volume.
  To cancel mute, press the **Mute** button again or press the **VOL +/–** buttons.

4.3 Audio



If the current programme is available in multiple audio languages, you can select the language that you wish to listen to.

1. Press the **AUDIO** button to display the audio menu.
2. Press the ▲/▼ button to select the required audio language and press the **OK** button.
3. Press the ◀/▶ button to select audio output (**Mono**, **Left**, **Right**, or **Stereo**).

B You can change a default audio language in the system setting menu mode.

4.4 Subtitle

If the current programme provides subtitle information, you can select the language for the subtitle.

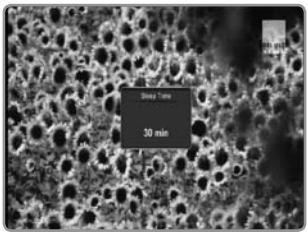
1. Press the **SUB-T** button to display the subtitle menu.
2. Press the ▲/▼ button to select the required subtitle language and press the **OK** button.
   - The subtitles will be displayed on the screen.

4.5 Teletext

If the current programme provides teletext, you can watch teletext.

Press the **TELETEXT** button.
The teletext is displayed on the screen.

4.6 Sleep Time



You can select a time period of between 10 and 90 minutes after which the receiver automatically switches to standby mode.

Press the **SLEEP** button to select the preset time interval (Off~90) for staying on.

4.7 Channel List

1. When you press the **OK** button during receiving service stream, you can view simple channel list.
2. Press the ▲/▼ button to select the required channel and then press the **OK** button.
3. Press the **TV/RADIO** button to switch between TV channels and radio channels.

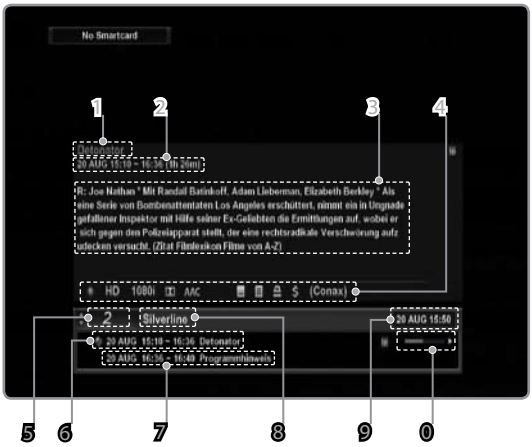
To get the channel sort list

1. Press the **Green** button to display the channel sort list.
2. Press the ▲/▼ button to select the sort list you want and then press the **OK** button to get it.

4.8 Channel Banner

When you press the **Blue** button during receiving service stream, you can view channel banner.

- Press the ▲/▼ button to select the channel and then press the **OK** button.
- Press the ◀/▶ button to view to previous or next programme information.
- Press the **Blue** button to view to the programme information.



1	**Programme name**	
2	**Programme broadcasting time**	
3	**Detailed programme infromation**	
4	**Icons**	
	R	Displayed when the programme is recording.
	HD	Displayed when the channel provides HD programmes.
	1080i	Displays the resolution of the current programmes.
	DD	Displayed when the programme is broadcast in Dolby Digital.
	AAC	Displayed when the programme is broadcast in AAC Audio.
		Displayed when the programme is broadcast in subtitle language.
		Displayed when the programme is broadcast in teletext.
		Displayed when the channel is a locked channel.
	$ (Conax)	Displayed when the channel is a scrambled channel.
	16	Indicates the minimum level of age for viewing the programme.
5	**Current channel number**	
6	**Current programme broadcasting time**	
7	**Next programme information**	
8	**Current channel name**	
9	**Current time**	
10	**Current programme progress bar**	

5. Menu Guide

5.1 PVR

5.1.1 File List

File List manages the files and directories in the built-in HDD.

1. Press the ▲/▼ button to select "**File List**" on the PVR menu and press the **OK** button.
2. Press the ▲/▼ button to select "**AV**", "**MP3**", or "**Photo**" and press the **OK** button. The files and directories saved in the HDD will appear.
3. Press the ▲/▼ button to select "**AV**", "**MP3**", or "**Photo**" and press the **OK** button.

AV	Directory that saves recorded files.
MP3	Directory that saves MP3 files.
Photo	Directory that saves photo image files.

Editing the File/Folder Lists

1. Press the **Yellow** button to display the edit menu on the File List menu.
2. Press the ▲/▼ button to select the desired option and press the **OK** button.
3. Use the ▲/▼/◀/▶/**OK** button to edit the selected file/folder list.

New Directory	To create a new directory in the current directory.
Rename	To change file or directory names. Characters such as 0~9, a~z, and A~Z can be used.
Delete	To delete a file or directory.
Move	To change the position of the files. Using the ▲/▼ button, select the files you want to move and press the **OK** button.
Copy	To copy the file to built-in HDD or USB memory. Using the ▲/▼ button, select the files you want to move and press the **OK** button.

Sorting the File/Folder Lists

1. Press the **Green** button on the File List screen.
   The file sort menu will appear.
2. Press the ▲/▼ button to select the arrangement method and press the **OK** button.

Title	To arrange files in file name order.
Date	To arrange files in date order.

5.1.2 Reservation

You can set reserved recording functions including adding, changing and deleting reserved recordings.

1. Press the ◀/▶ button to select "**PVR**" in the main menu and press the **OK** button.
2. Press the ▲/▼ button to select "**Reservation**" and press the **OK** button. Reservation screen is displayed.

Adding

1. Press the **Red** button to display the add screen.
2. Press the ▲/▼ button on the add screen to select the items for setting.

Channel	To select the channel you want to record.
Mode	To select the interval for the reserved recording. You can choose to record once, daily or weekly.
Date	To set the date for the reserved recording.
Start	To set the time the reserved recording starts.
End	To set the time the reserved recording ends. If end time is passed, the reserved recording will stop.

3. Press the **Red** button to save.

Changing

1. Press the ▲/▼ button to select a reserved recording to be change and press the **Yellow** button.
2. When the edit screen appears, change the reserved recording in the same way as you did with adding.

Deleting

- Pressing the **Green** button on the edit screen deletes the selected recording list only.
- To delete all reserved recording lists, press the **Green** button on the Reservation screen and then press the **OK** button.

B If you skip a reserved channel, or delete it, the reserved settings are canceled.

5.1.3 PVR Setting

You can use the PVR functions effectively by setting the following PVR options.

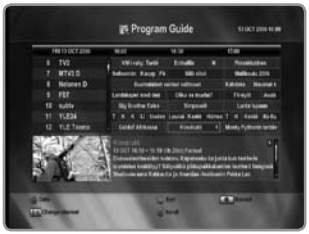
1. Press the ◀/▶ button to select "**PVR**" in the main menu and press the **OK** button.
2. Press the ▲/▼ button to select "**PVR Setting**" and press the **OK** button. The PVR Setting option is displayed.
3. Select the desired option and set it as you want.

Guard Time Start	To set the guard time start of the reserved recording.
Guard Time End	To set the guard time end of the reserved recording.
Default Record Duration	To set the default record duration.
Instant Replay	To set the interval of instant replay time.
Commercial Skip	To set the interval of skip time.

5.2 Program Guide

The program guide displays programme information about each channel, based on the date and time.
You can also reserve a recording by pressing the ● **(Record)** button.

5.2.1 Viewing the Program Guide Information



1. Press the ◀/▶ button to select "**Program Guide**" on the main menu and press the **OK** button.
   - You can access program guide simply by pressing the **GUIDE** button on the remote control.
2. Press the **EXIT** or **GUIDE** button to exit the program guide screen.

▲/▼/◀/▶	To move the cursor to the up, down, left, or right.
OK	To switch the selected channel. (among the currently serviced programs)
Red	To check the program guide on the desired date.
Green	To sort the channel lists.
Blue	In case detailed info content is too long to check, you can check its information as a long lists form, and resize its lists by pressing **Blue** button.
Record	To reserve recording of the channel.

B The Program Guide information might not be supported by the service providers.

5.2.2 Recording Reservation by Program guide

You can set a programme to be record at a specific time by program guide.

1. Press the ◀/▶/▲/▼ button to select to the programme to be record and press the **Record** button.
   - The reservation icon is displayed.
2. Press the ◀/▶/▲/▼ button to select the programme reserved and press the **Record** button again.
3. Select the desired option and set it as you want.
4. Press the **Red** button to save.
   - You can check the reserved recording list by using the "**PVR**" > "**Reservation**" menu.
   - You can also delete or edit the reserved recording list.

B For more information about recording reservation, refer to ***5.1.2 Reservation***.

5.3 Edit Channel List

You can create favorite lists, lock, delete, or skip channel.

1. Press the ◀/▶ button to select "**Edit Channel List**" in the main menu and press the **OK** button.
   - Enter the PIN code using the **Numeric** (0~9) button.
2. Press the ▲/▼ button to select the desired option and press the **OK** button.
3. Among the all channel lists, the selected channel can be moved to the right folder of "**Lock**, **Delete**, or **Skip**, **Favorite (1~16)**".
   - To add from edit list at right folder, press the **OK** button.
   - To remove the channel list from edit list at right folder, press the **OK** button.
   - To sort the channels, press the **Green** button. Select the desired arrangement and press the **OK** button.
   - If you want to include all the channels in the channel list, press the **Red** button.
   - To rename the favorite, press the **Blue** button.
4. To confirm the channel list, press the **MENU** button or **EXIT** button and press the **OK** button to save.

B The PIN code preset to 0000 from the factory.

Lock

You can lock channels in any of the list in order to prevent e.g. your children from watching.

1. Press the ▲/▼ button to select the channel you want to lock and press the **OK** button.
2. Repeat the procedure for each channel you want to lock.
   When you lock a channel in any list, the channel will be locked automatically in all other lists.

Skip

You can skip the TV or Radio channel from the current list.

Press the ▲/▼ button to select the channel you want to skip and press the **OK** button.

- To recover the skipped channel, press the **OK** button from edit list.

Favorite (Favorite 1~16)

You can edit favorite TV and Radio list. This enables you to create the 16 favorite TV and Radio lists.

Press the ▲/▼ button to select the channel you want to edit on the favorite list and press the **OK** button.

5.4 Installation

You can search the channels according to the automatic or manual mode. Please wait until the channel search is complete.

Automatic Search

1. Press the **Numeric** buttons to set the Start Frequency, End Frequency, and Symbol Rate of the cable signal.
2. Press the ◀/▶ button to select the constellation ("**Auto**, **16**, **32**, **64**, **128**, or **256 QAM**").
3. Press the **OK** button and searching will start.
4. When searching is finished, press the **OK** button to save the channel list.

Manual Search

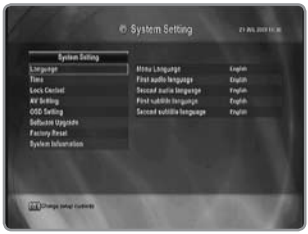
1. Press the **Numeric** buttons to set the Start Frequency and Symbol Rate of the cable signal.
2. Press the ◀/▶ button to select the constellation ("**Auto**, **16**, **32**, **64**, **128**, or **256 QAM**").
3. Press the ◀/▶ button to select the spectral invert ("**Auto**, **Off**, or **On**").
4. Press the ◀/▶ button to select for the network search ("**Off**, or **On**"). When you select "**On**", you can find more services using the home network.
5. Press the **OK** button and searching will start.
6. When searching is finished, press the **OK** button to save the channel list.

Network ID

1. Press the **Numeric** buttons to set the Start Frequency and Symbol Rate of the cable signal.
2. Press the ◀/▶ button to select the constellation ("**Auto**, **16**, **32**, **64**, **128**, or **256 QAM**").
3. Press the ◀/▶ button to select the spectral invert ("**Auto**, **Off**, or **On**").
4. Press the **Numeric** buttons to set the Network ID.
5. Press the **OK** button and searching will start.
6. When searching is finished, press the **OK** button to save the channel list.

5.5 System Setting

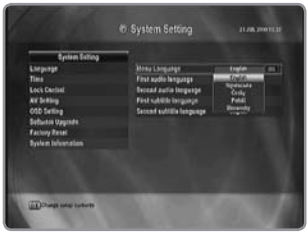
If you want to customize the system to suit you better, you can specify some settings from the submenus in the "**System Setting**" menu.



1. Select "**System Setting**" in the main menu with the ◀/▶ buttons and press the **OK** button.
2. Press the ▲/▼ button to select the sub menu and press the **OK** button.

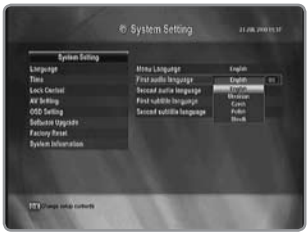
5.5.1 Language

You can select the desired language of the Menu, Audio, or Subtitle.



Menu Language

You can select in which language the menus will be shown.
Press the ▲/▼ button to move to the language you want and press the **OK** button.

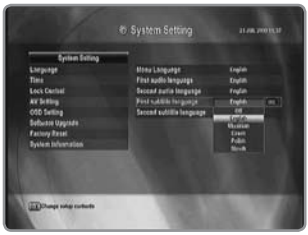


First audio language/Second audio language

You can change default language for audio when changing services.
Press the ▲/▼ button to move to the language you want and press the **OK** button.

B

- Select the audio language between the first and second audio language.
- If the first audio language is not selected, then the second audio language is selected by default. (If both the first and second audio language are not available, the audio language is set to the first audio language the selected channel supports for.)



First subtitle language/Second subtitle language

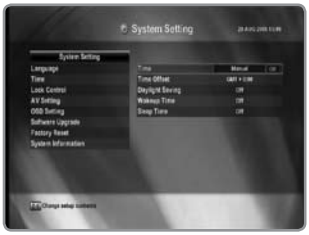
You can change default language for subtitle when changing services.
Press the ▲/▼ button to move to the language you want and press the **OK** button.

B

- If you cancel the subtitle function, select the off.
- Select the subtitle language between the first and second subtitle language.
- If the first subtitle language is not selected, then the second subtitle language is selected by default. (If both the first and second subtitle language are not available, the subtitle language is set to the first subtitle language the selected channel supports for.)

5.5.2 Time

You can set the Local time, Wakeup time, and Sleep time.



Time

You can set your local time according to your location.

When "Auto" is selected

Press the ▲/▼ buttons to select desired country and press the **OK** button.

When "Manual" is selected

1. Press the ◀/▶ button to select the current time zone from standard time, then and press the **OK** button. When you press the ◀/▶ button, the time zone will move by 30 minutes.
2. If you want to turn the Day Light Saving on, press the ▲/▼ button to select "**On**" and press the **OK** button.

Wakeup Time/Sleep Time

You can set the On/Off timers so that the receiver will switch on or off automatically at the time you select.

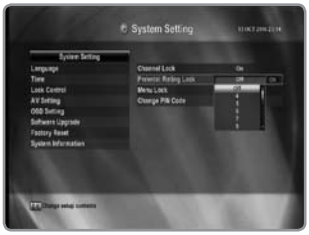
1. Press the ◀/▶ button to select the desired option ("**Off**", "**Once**", "**Daily**", "**Weekly**", or "**Weekday**").
2. Use the **Colour**/▲/▼/◀/▶ button to select the year, month, and day and then press the **OK** button.
3. Press the ▲/▼ button to move the cursor and then use the **Numeric** (0~9) button enter the hour and minute.

5.5.3 Lock Control

Channel Lock

When you change "**Channel Lock**" to "**On**" or "**Off**", service channel can get or not from that set values.

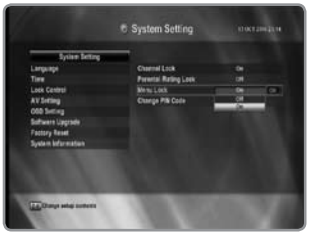
- If you select "**On**", you need PIN code every time you select the lock channel program as you set in the channel control.
- If you select "**Off**", you can see all channels without PIN code.



Parental Rating Lock

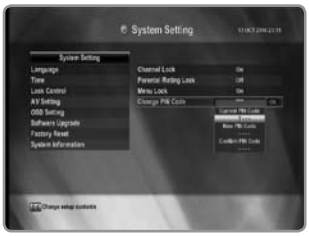
Parental Rating Lock enables you to place certain restrictions on the viewers by setting age limits. The password is required to view the blocked programmes.

Press the ▲/▼ button to select to the desired option and press the **OK** button.



Menu Lock

If the Menu Lock is set to "**On**", the PIN code is needed to set the Edit Channel List, Installation, Format HDD and System Setting.



Change PIN Code

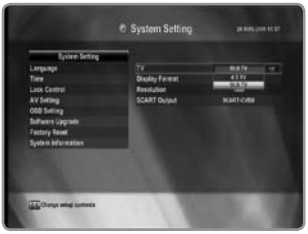
You can change the PIN code from the standard 0000.
DO NOT FORGET IT! Without it, you are not able to access to any of the functions where the code is required.
You can change password for Channel Lock and Menu Lock simultaneously.

1. Enter the current PIN code using **Numeric** (0~9) button on the remote control.
2. In the selected New PIN code, enter a new PIN code.
3. To verify the new PIN code, re-enter a new PIN code in the selected confirm PIN code.
   - If the PIN code is correct, the message "**Success**" will be displayed on the screen.

B If you forget the PIN code, press the ***Colour*** button in sequence:
Red → ***Green*** → ***Yellow*** → ***Blue***.
The PIN code will be changed to "0000".

5.5.4 AV Setting

You can set various options related to input/output signals.



TV

You can set the aspect ratio of your TV.

Press the ▲/▼ button to select desired option and press the **OK** button.

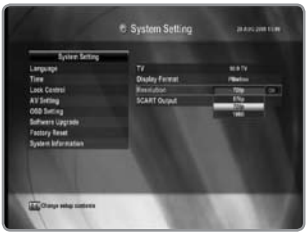
- If you have a TV set with 4:3 picture format, select 4:3 TV and if you have a TV set with 16:9 picture format, select 16:9 TV.

Display Format

You can select the display format according to the TV screen ratio.

Press the ▲/▼ button to select desired option and press the **OK** button.

4:3 TV	Auto, Letterbox, Center cut
16:9 TV	Auto, Pillarbox, Pan and scan



Resolution

The receiver supports various video resolutions (576p, 720p, and 1080i).

Press the ▲/▼ button to select desired option and press the **OK** button.

SCART Output

If your SCART supports RGB control, select "**SCART-RGB**".
Otherwise select "**SCART-CVBS**".

5.5.5 OSD Setting

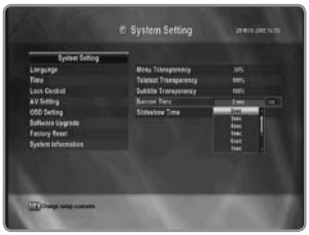
You can adjust the on-screen transparency and set the banner time.

Menu/Teletext/Subtitle Transparency

From 20% to 100% will give the variable transparency on Video and OSD screen.

Press the ▲/▼ button to select the desired transparency and then press the **OK** button.

- The transparency will be applied on the screen.

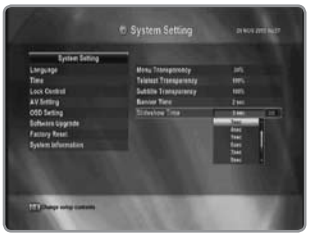


Banner Time

When you switch channels, an information banner will be shown for a few seconds. You can select for how long the banner will be shown.

Press the ▲/▼ button to select the banner time (1~10sec) you want and then press the **OK** button.

- Each selectable time items has meaning of the interval time during a channel banner stays on changed channel screens.



Slideshow Time

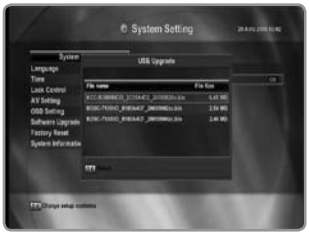
Press the ▲/▼ button to select the slideshow time (1~10sec) you want and then press the **OK** button.

5.5.6 Software Upgrade

Software can be downloaded through OTA (Over The Air) or USB connection.

OTA Upgrade

It is possible to set up OTA upgrade manually.
Please check if there is new software as pressing the **OK** button after entering **Frequency**.
Updated software will be downloaded.



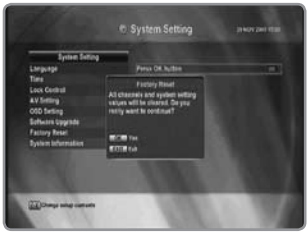
USB Upgrade

You can upgrade the software using theUSB jack of the receiver.

1. Press the ▲/▼ button to select "**USB Upgrade**" and press the **OK** button.
2. Press the ▲/▼ button to select the upgrade file and press the **OK** button. The software upgrade will begin.

5.5.7 Factory Reset

Use this option only if you have to start the complete installation procedure from scratch.
If you perform the Factory Reset, all your previous settings and all channels will be cleared! The default data will be loaded.



1. Press the ▲/▼ button to select "**Factory Reset**" and then press the **OK** button.
2. If you want to reset, press the **OK** button, or press the **EXIT** button to exit this menu.

5.5.8 System Information

Displays the system information: Model name, S/W, H/W, Loader version.

Press the ▲/▼ button on the Setup list to select "**System Information**".

5.6 CA System

The menus are provided by the CA module and its smart card.

Your receiver is equipped with 1 slot of smart card.
Plug in the appropriate a valid smart card.
You will then have access to the respective scrambled and Pay-Per-View services provided.

Insert the smart card into the slot. The smart card determines the programs that can be de-scrambled. The smart card contains your subscription details so that you can view your entitlement.

- If you do not insert the smart card, you will see the message "**No smart card**".
- If you insert the smart card into the slot then you can watch your selected channel.

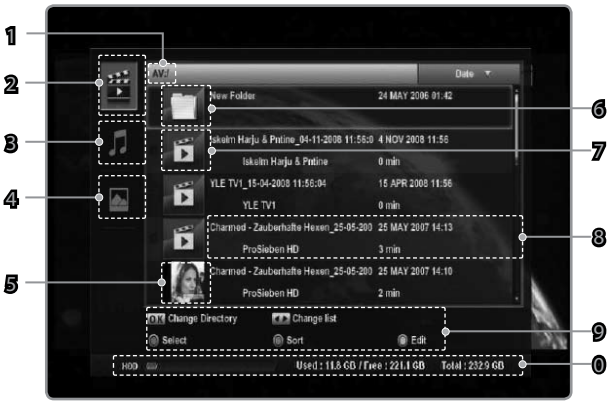
6. PVR Guide

6.1 Recorded List

You can check the recorded programme on "**File List**".

6.1.1 Recorded List screen

Press the **Recorded List** button on the remote control to display the recorded list. The recorded list displays as the following. Also you can view the recorded list in the "**PVR**" > "**File List**" menu.



1		**Path of present folder**
2		**Recorded programme list**
3		**MP3 file list**
4		**Photo file list**
5		**Thumbnail of recording**
6		**Folder icon**
7		**File Icon**
8		**File name, time, date, duration**
9		**Button help**
10		**Used size of HDD**

B When a USB memory is connected to the USB jack, the USB icon is displayed on left of File List screen.

6.1.2 Play Option

1. Press the **Recorded List** button on the remote control.
   - The recorded list will appear.
2. Press the ▲/▼ button to select the desired programme and press the press the **OK** button.

Begin	To play the programme from the beginning.
Continue	To continue to play from the previous stop point.
Descramble	To descramble file and store it again.
Cancel	To cancel playback.

3. Press the ▲/▼ button to select "**Begin**" or "**Continue**" and press the press the **OK** button.
   - The selected programme is played back.
   - When press the **Progress bar** button on the remote control, progress bar is displayed on the screen.
   - To display the help box, press the **Blue** button while the progress bar appears on the screen.

6.2 Progress Bar

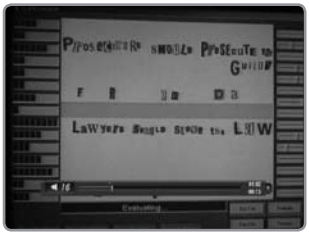
Press the **Progress bar** button while watching a recorded programme to display the progress bar. Progress bar displays the current play status, the recorded time, and elapsed time.

6.3 Playback

The programme can be played in various ways.

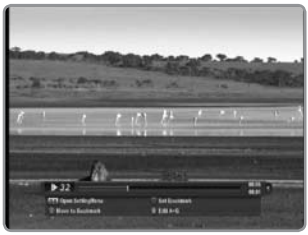
6.3.1 Fast-Forward/Rewind

The Fast-Forward and Rewind functions enable the user to view the forward, backward or any desired part of the programme.



- To view forward parts press the ▶▶ (Fast Forward) button and to view previous parts press the ◀◀ (Fast Rewind) button on the remote control.
- Each time you press the button, the speed increases. (x2, x4, x8, x16, x32)
- Press the ▶ (Play) button at the desired place to play at the recorded speed.

6.3.2 Slow motion

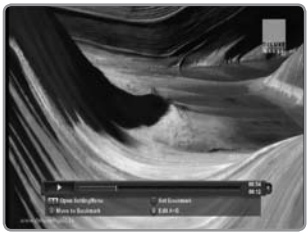


- Press the ⏸ (Pause) button during playback, and press the ◀◀ (Fast rewind) / ▶▶ (Fast forward) button to play backward/forward as slow motion.
- Each time you press the button, the prograqmme plays at 2x, 4x, 8x, 16x, and 32x speed.
- Press the ▶ (Play) button to play at the recorded speed.

6.3.3 Instant Replay

- Press the ↶ (Replay) button to jump back and play from that location. When the replay is completed the programme will play from the current point.
- You can set the replay time interval by using the PVR setting menu.

6.3.4 Commercial Skip



- Press the ↷ (Skip) button to jump forward and play from that location. When the skip is completed the programme will play from the current point.
- You can set the skip time interval by using the PVR setting menu.

6.3.5 Direct jump

1. Press the **Progress bar** button on the currently playing screen. The progress bar will appear.
2. Press and hold the ◀/▶ button to move the location icon to a time point and release the ◀/▶ button to play the programme from the specified time point.

6.3.6 Repeat A-B

You can set a specific block within a recorded programme and play it back repeatedly.

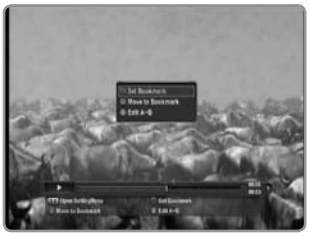
Press the **Yellow** button once at the start position and press the **Yellow** button again at the end position.
The programme is played back the selected block repeatedly.

To stop repeat mode

1. Press the **OK** button.
2. Press the ▲/▼ button to select "**Off repetition**" and press the **OK** button. Alternatively you can use the **Yellow** button.

6.3.7 Bookmark

Use bookmarks to search positions quickly and conveniently.



1. Press the **Progress bar** button on the currently playing screen. The progress bar will appear.
2. Press the **Red** button at a certain position to set a bookmark.
3. Press the **Green** button to display bookmark list and press the ◀/▶ button to select the location you want to view.
4. To delete a bookmark, select the location you want to delete and press the **Red** button.

6.4 Time Shift Recording

The receiver automatically saves the programme in the built-in hard disk drive temporarily, so that users can pause, play, fast rewind, fast forward, replay, etc. even while watching the currently broadcasting TV programme. When you press the ◀◀ (Fast Rewind) or ❚❚ (Pause) button, the time shift will be start.

6.5 Instant Recording

You can record a programme using the built-in hard disk drive without an external media device.

Press the ● (Record) button to record the current programme instantly. The record icon and default record time is displayed.

6.6 Multi Channel Recording

You can record two channels simultaneously.

6.7 Stop Recording

1. Press the □ (**Stop**) button.
   The stop list is displayed.
2. Press the ▲/▼ button to select the recording list to be stop and press the □ (**Stop**) button.

6.8 MP3/Photo

You can play MP3 or photo files stored on built-in hard disk drive, USB memory.
Use a USB cable to connect the USB memory to the receiver.

6.8.1 Connecting the USB Memory

1. Save MP3 and image files into USB memory from your PC.
2. Connect the USB memory to **USB** jack on the receiver.

6.8.2 Playing back the Files

1. Press the ◀/▶ button to select "**PVR**" in the main menu and press the **OK** button.
2. Press the ▲/▼ button to select "**File List**" and press the **OK** button.
3. Press the ▲/▼ button to select "**MP3**" or "**Photo**" and press the **OK** button.
   The MP3 or Photo files are displayed.
4. Press the ▲/▼ button to select the desired file and press the press the **OK** button.
   The selected file is played back.

7. Supplement

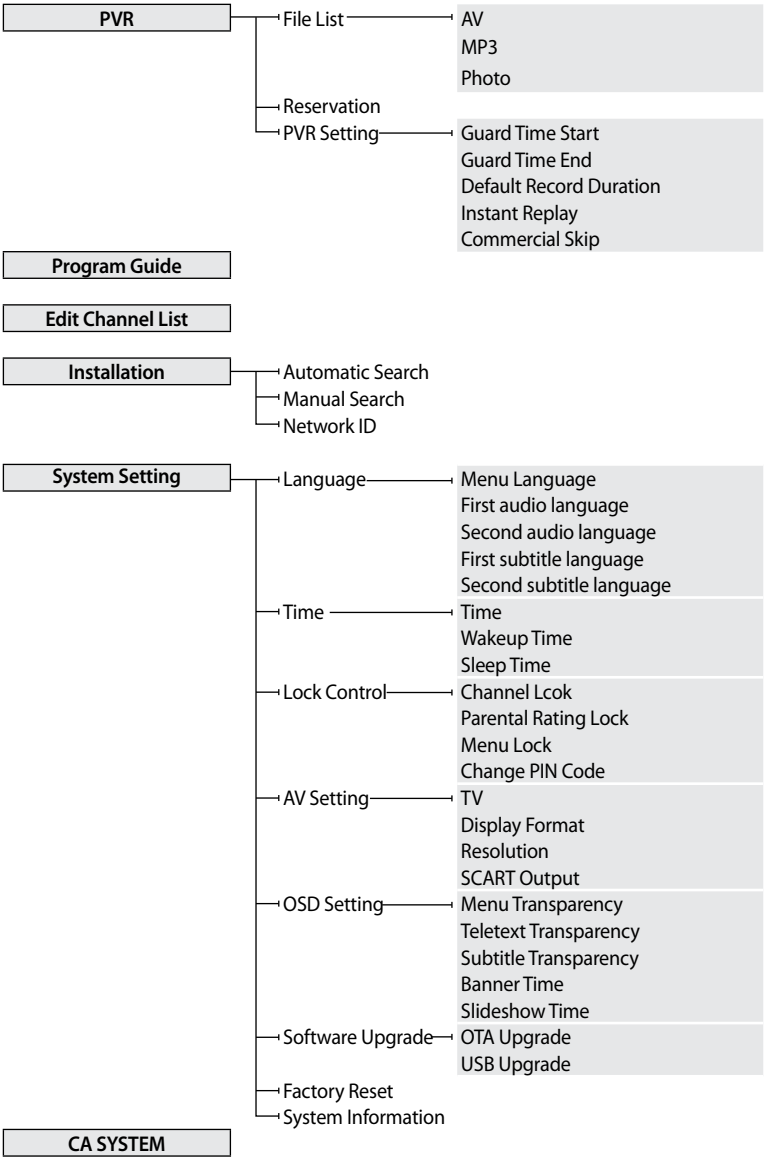
7.1 Troubleshooting

Problem	Solution
No display LED on the front panel. No power supply.	▪ Power cord plug in correctly.
No picture.	▪ Ensure that the receiver is switched on. ▪ Check connection and correct. ▪ Check channel and video output and correct.
Poor picture quality.	▪ Check the signal level, if it is low. ▪ Check that the RF cable is properly connected.
No sound.	▪ Check the volume level of the TV and receiver. ▪ Check the mute status of the TV and receiver.
Remote control does not operate.	▪ Point remote control directly towards the receiver. ▪ Check and replace batteries. ▪ Check that nothing blocks the front panel.
Service is not running or scrambled.	▪ Check that the smart card is appropriate for the selected service.
You have forgotten your secret PIN code.	▪ Refer to change PIN code of this user's manual.

7.2 Technical Specification

System Resources	
Flash Memory	32Mbytes
Program DRAM	256Mbytes
EEPROM	32KBytes
MPEG TS A/V DECODING	
Transport stream	MPEG-4/H.264 HP@L4.0 1920x1080 interface@50Hz
MPEG Profile/level	MPEG-2 MP@HL, MPEG-4/AVC MP@L4
Input bit rate	Max. 81,0 Mbit/Sec.
Video aspect ratio	4:3, 16:9, Letter Box
Video formats	576p, 720p, 1080i
Video outputs	SD output: PAL HD Resolution: 1080i, 720P, 576P
Audio decoding	Dolby AAC, AC-3, MPEG-1 layers 1,2 and 3 (MP3)
Audio modes	Single Mono, Dual mono, Stereo, Joint stereo
Sampling rate	32,0, 44,1 and 48,0 kHz
DATA INPUT/OUTPUT	
Output connectors	SCART TV and SCART VCR SPDIF(OPTICAL), HDMI, RJ45, USB2.0
Descrambling & Access control	
Standard	DVB common Scrambling algorithm (ETR 289)
Number of smart card slots	ONE slot (One smartcard slot is included in the front panel.)
Location	Front panel
Standard	Connector on bottom side of smartcard ISO 7816 Part 3
Power Supply(Internal)	
Input Voltage	AC 90-250V, 50/60Hz
Power Consumption	40W
Protection	Separate Internal Fuse
Type	SMPS
Hard disk	
Interface	SATA
Capacity	250~500 Gbytes
Physical Specification	
Operation Temperature	0˚ ~ 50˚C
Storage Temperature	-20˚ ~ 60˚C
Size (W*H*D)	370*60*280 mm
Net weight	3.0Kg

7.3 Menu Map


PVR
File List
AV
MP3
Photo
Reservation
PVR Setting
Guard Time Start
Guard Time End
Default Record Duration
Instant Replay
Commercial Skip
Program Guide
Edit Channel List
Installation
Automatic Search
Manual Search
Network ID
System Setting
Language
Menu Language
First audio language
Second audio language
First subtitle language
Second subtitle language
Time
Time
Wakeup Time
Sleep Time
Lock Control
Channel Lcok
Parental Rating Lock
Menu Lock
Change PIN Code
AV Setting
TV
Display Format
Resolution
SCART Output
OSD Setting
Menu Transparency
Teletext Transparency
Subtitle Transparency
Banner Time
Slideshow Time
Software Upgrade
OTA Upgrade
USB Upgrade
Factory Reset
System Information
CA SYSTEM

7.4 Remote Control TV Setting

7.4.1 Checking the Set-Up Code

1. Press the **TV STANDBY** button with **OK** button on the remote control for 2 seconds to covert to Setting Mode.
   - It will convert to the Setting Mode after the LED is on.
2. Press the **INFO** button.
   - Set-up code will blink in oder as number of 100 digits, 10 digits, 1 digits. (Only 0 is blink 10 times.)

7.4.2 Using the Three Digit Code

1. Press the **TV STANDBY** with **OK** button on the remote control for 2 seconds to convert to Setting Mode.
   - It will convert to the Setting Mode after the LED is on.

B Setting mode will be exited if no input is made for more than 20 seconds.

2. Point the remote control toward the TV.
3. Find the 3-digit code for your manufacturer on the list below, and enter the code by using the number buttons.
   - The LED will blink once each time you enter the number.
4. Press the **OK** button to finish.
   - The LED will blink 2 times and becomes "**Off**" status.

B Some buttons may not work.

7.4.3 Using the Auto Search (TV CH+/-)

1. Press the **TV STANDBY** with **OK** button on the remote control for 2 seconds to convert to Setting Mode.
   - It will convert to the Setting Mode after the LED is on.

B Setting mode will be exited if no input is made for more than 20 seconds.

2. Point the remote control toward the TV.
3. Press the **TV CH** + or - button.
   - The LED will blink once each time you press the button.
4. Press the **OK** button to finish.
   - The LED will blink 2 times and becomes "**Off**" status.

B Some buttons may not work.

7.4.4 Resetting the TV to the Factory Defaults

Press the **TV STANDBY** with ● **(Record)** button on the remote control for 5 seconds.
- After the LED blinks 5 times, resets all settings to the default values.

7.4.5 TV Code Lists

Manufacturer/Brand	Set-Up Code Number
ADMIRAL	072 081 160 161 096
ADVENT	247
AIKO	103
AKAI	006 146 248
ALARON	028
AMARK	112 143
AMERICA ACTION	043
AMPRO	073
ANAM	043 054 055 056 080 112
AOC	058 006 004 112
APEX DIGITAL	015 226
AUDIOVOX	076 103 043
BAYSONIC	043
BELL&HOWELL	072
BRADFORD	043
BROKSONIC	096
CANDLE	006 002 003 004
CAPEHART	058
CARVER	164
CELEBRITY	001
CETRONIC	043
CINERAL	103 120
CITIZEN	006 002 003 004 101 103 143
CLASSIC	043
CONCERTO	004
CONTEC	043 051
CORONADO	143
CRAIG	043 054 028
CROSLEY	164
CROWN	043 143
CURTIS MATHES	006 004 101 143 011 072 081 120 164
CXC	043
DAEWOO	076 103 055 004 127 143 016 043 044 125 120
DAYTRON	004 143
DENON	011
DUMONT	004 073
DWIN	161
DYNASTY	043
DYNATECH	062
ELECTROBAND	001
ELECTROHOME	024 076 143
EMERSON	005 028 043 048 076 096 155 004 051 143 151 153 154
FISHER	007 057
FUJITSU	164 028 198 246
FUNAI	028 043 052 249
FUTURETECH	043
GATEWAY	242
GE	006 073 144 160 161 004 008 009 034 056 074 091 155 081 120
GIBRALTER	004 073
GOLDSTAR	004 106 119 110 112 113 127 143
GRUNPY	028 043
HALL MARK	004

Manufacturer/Brand	Set-Up Code Number
HARLEY DAVIDSON	028
HARMAN KARDON	164
HARVARD	043
HITACHI	163 004 007 009 011 072 010 012 023 075 143 158
INFINITY	164
INKEL	129
INTEQ	073
JBL	164
JCB	001
JCPENNEY	004 006 008 024 030 065 101 143 156 160
JENSEN	013
JVC	038 001 034 083 206 217 068 069
KENWOOD	006 001
KLOSS	002 059
KTV	006 043 143 154
LG	004 106 119 110 112 113 127 143
LODGENET	072
LOEWE	207 164
LOGIK	072
LUXMAN	004
LXI	007 015 052 081 160 164
MAGNAVOX	006 003 004 022 059 060 061 063 064 127 164 094 160 028 250
MAJESTIC	072
MARANTZ	164 006
MATSUI	164
MATSUSHITA	080
MEGATRON	004
MEMOREX	004 007 072 028 096
METZ	088
MGA	024 006 004 042
MIDLAND	073
MINERVA	088
MINUTZ	008
MITSUBISHI	109 024 042 004 040 146 028 081 225
MOTOROLA	081
MTC	006 004 062 101
MULTITECH	043
NAD	015 025
NEC	006 134 040 056 007 019 024 237
NIKEI	043
NIKKO	103
NTC	103
ONKING	043
ONWA	043
OPTIMUS	080
OPTONICA	019 081
ORION	096 201 202 203 204 205 028
PANASONIC	034 056 080 164 208 222
PHILCO	006 003 004 024 056 059 060 063 064 127 143 164
PHILIPS	164 005 038 093 127 006 003 004 059 210

- The bigger numbering value of input code for each manufacturer indicates the newest model of production.

Manufacturer/Brand	Set-Up Code Number
PIONEER	023 025 135 176 004 018 006 209 234
PORTLAND	004 143 103
PRISM	034
PROSCAN	144 160 161
PROTON	004 058 143 171 173 112
QUASAR	034 056
RADIO SHACK	004 019 127 143 043
RCA	160 161 144 156 065 006 004 023 024 056 074 152 081
REALISTIC	007 019
RUNCO	072 073
SAMPO	006 004 058 242
SAMSUNG	004 101 127 133 143 160 089 105 211 228 229
SANSEI	120
SANSUI	096
SANYO	007 053 057 082 020
SCOTCH	004
SCOTT	004 005 028 043 048 143
SEARS	004 007 015 028 030 057 082 094 143 160 052 164
SEMIVOX	043
SEMP	015
SHARP	081 014 019 028 004 022 143 175
SIGNATURE	072
SONY	001 126 139
SOUNDESIGN	003 004 028 043
SPECTRICON	112
SQUAREVIEW	052
SSS	004 043
STARLITE	043
SUPRE MACY	002
SUPREME	001
SYLVANIA	006 003 059 060 063 064 127 160 164 044 249
SYMPHONIC	052 249
TANDY	081
TATUNG	056 062
TECHNICS	034 080
TECHNOL	ACE 028
TECHWOOD	004
TEKNIKA	002 003 004 024 028 043 072 101 143 103 164
TELERENT	072
TERA	172
TMK	004
TNCI	073
TOSHIBA	015 030 007 040 062 101
TOTEVISION	143
UNIVERSAL	008 009
VIDEO CONCEPTS	146
VIDIKRON	174 188 164
VIDTECH	004
WARDS	004 064 164 008 009 019 028 060 061 063 072 074 143
WESTING HOUSE	076
YAMAHA	004 006
YORK	004
YUPITERU	043
ZENITH	072 073 095 103 011 096
ZONDA	112

Memo